For Information on 26 April 2019

Legislative Council Panel on Health Services Subcommittee on Issues Relating to the Support for Cancer Patients

Prevention and Treatment of Cancer

PURPOSE

This paper briefs Members on the current situation of cancer in Hong Kong and the measures implemented by the Government on prevention and treatment of cancer.

BACKGROUND

Current Situation in Hong Kong

- 2. Cancer is a major public health issue in Hong Kong and the burden of cancer has been increasing in Hong Kong. In 2016, there were 31 468 newly diagnosed cancer cases and the most common cancers were colorectal cancer (17.3%), lung cancer (15.7%), breast cancer (13.1%), prostate cancer (6.1%) and liver cancer (5.8%). In 2017, there were 14 354 cancer deaths and the leading five causes of cancer deaths were lung cancer (27.1%), colorectal cancer (14.9%), liver cancer (10.8%), breast cancer (5.0%) and pancreas cancer (4.8%).
- 3. In view of a growing and ageing population, the number of new cancer cases and related healthcare burden are expected to continue to increase. Nonetheless, the age-standardised incidence rate for all cancers("ASI"), which is a measure of the risk of developing cancer after accounting for the influence of age, has been falling slightly in males while the initial decline of ASI in females observed in the early years has reverted to an upward trend in the last decade. The age-standardised mortality rates ("ASM") have been decreasing for both genders.

Cancer Coordinating Committee

- 4. The Government accords high importance to cancer prevention and control. As early as 2001, the Government established the Cancer Coordinating Committee ("CCC"). Chaired by the Secretary for Food and Health and comprising members who are cancer experts, academics, doctors in public and private sectors as well as public health professionals, the CCC formulates strategies on cancer prevention and control and steers the direction of work covering prevention and screening, surveillance, research and treatment.
- 5. The Cancer Expert Working Group on Cancer Prevention and Screening ("CEWG") set up under the CCC (<u>Annex A</u>) regularly reviews local and international evidence and makes recommendations on cancer prevention and screening applicable to the local setting. So far, CEWG has made recommendations on prevention and screening for nine selected cancers, namely cervical, colorectal, breast, prostate, lung, liver, nasopharyngeal, thyroid and ovarian cancers.
- 6. In addition to the CEWG, the structure of the CCC also comprises the Department of Health ("DH"), the Hong Kong Cancer Registry ("HKCaR"), the Hospital Authority ("HA") and the Research Office of the Food and Health Bureau which oversees cancer surveillance, cancer treatment and cancer research respectively and directly report to the CCC.

PREVENTION AND CONTROL

Primary Prevention of Cancer

7. Risk factors for cancers are closely related to lifestyles. Currently, about 40% of cancers can be prevented by avoiding or modifying risk factors and implementing existing evidence-based prevention strategies. An individual's risk of developing cancer can substantially be reduced through adoption of healthy lifestyles, such as avoiding smoking and alcohol consumption, having regular exercise, and adequate consumption of fruits and vegetables. To address the burden of non-communicable diseases including cancer, the Government launched "Towards 2025: Strategy and Action Plan

to Prevent and Control Non-communicable Diseases in Hong Kong" with focus on four NCDs (namely cardiovascular diseases, cancers, chronic respiratory diseases and diabetes) and four shared behavioural risk factors (namely unhealthy diet, physical inactivity, tobacco use and harmful use of alcohol).

8. All along, the Government has promoted primary cancer prevention through various health promotion, education and protection efforts in collaboration with community partners, so as to reduce the burden of cancer. The Government has been deploying a range of communication channels to convey health messages to the public and has been in liaison with community partners, women groups and non-governmental organisations for promotion of cancer prevention.

Principles of Screening

- 9. Other than primary prevention, screening as a tool for secondary prevention is effective against some cancers such as cervical cancer and colorectal cancer. Cancer screening aims to detect early cancers or to identify precancerous disease in apparently healthy (asymptomatic) individuals, so that treatment can be carried out more effectively.
- 10. The list of criteria as promulgated by World Health Organization for instituting a population-based screening programme is set out at Annex B. Based on these considerations, not all evidence-based screening methods justify their use on a population scale screening programme. Furthermore, all screening tests have their limitations as they are not 100% accurate. There are false positive and false negative results, possibility of over-diagnosis and over-treatment. Individuals considering cancer screening tests (including commercially available screening tests) should seek advice from doctors for assessment of need and obtain full information on the potential benefits and harms of having the test before making an informed decision.
- 11. From the public health perspective, the Government must carefully assess a number of factors when considering whether to introduce a population-based screening programme for a specific cancer, such as local prevalence of the cancer, accuracy and safety of the screening tests, effectiveness in reducing incidence and mortality rates, feasibility of

implementation of a screening programme, the capacity of the healthcare system with respect to resources, manpower and infrastructure, and public acceptance. The overriding concern is whether screening does more good than harm to society. Based on these principles, the Government has launched territory-wide screening programmes for cervical cancer and colorectal cancer.

SURVEILLANCE

- 12. The HKCaR, established in 1963 as a population-based cancer registry, is a member of the International Association of Cancer Registries ("IACR"). Its main mission is to collect and report the local cancer incidence and mortality rates, by collecting, consolidating and validating basic demographic data, information on the topography and histology of all cancers diagnosed in Hong Kong. In addition, collection of information on staging, initial treatment and survival data has commenced for specific cancers in recent years. Analyses of these information demonstrate variations in cancer pattern in Hong Kong over time, and thus provides a basis for comparative geographical, epidemiological and clinical research.
- 13. It is noteworthy that the completeness of cancer registration by the HKCaR is reckoned to be 97% or higher though the notification from medical practitioners is not mandatory. It is important to facilitate the HKCaR's continuous efforts to strive for improvement in efficiency and accuracy in the data collection. This can be achieved by better integration of the HKCaR's database with the information systems of hospitals and laboratories in both public and private sectors, and by standardisation of the reporting format. Indeed, future success of local cancer surveillance counts on the continuous collaboration and support the HKCaR has been rendered by all healthcare professionals and medical institutions who collect information on cancer patients in Hong Kong in their clinical service.

TREATMENT

Cancer Service in Public Hospitals

14. Cancer service provided by the HA is based on a coordinated cross-

specialty (e.g. pathology, radiology, medicine, surgery, clinical oncology, palliative) and cross-disciplinary service system. The service is organised on cluster basis. HA currently operates six cluster-based oncology centres¹ and each centre is networked with other hospitals and clinics within the cluster to provide cancer care through in-patient, day-patient, out-patient and outreach home care; from diagnosis to treatment, rehabilitation, palliation and end-of-life care. HA also networks with non-government organisations in providing psychosocial support to cancer patients and their families at the community level.

- 15. With the increase in new cases every year and the advance in technology, the demand for cancer services from diagnosis, imaging to therapeutic treatment like surgery, radiotherapy and chemotherapy is expected to increase progressively.
- 16. HA places high importance in providing optimal care for cancer patients. HA reviews on a regular basis the waiting time for patients with colorectal cancer, breast cancer and nasopharyngeal cancer to receive their first treatment after diagnosis. During the period between July 2017 and June 2018, the waiting time at the 90th percentile² for patients with colorectal cancer, breast cancer and nasopharyngeal cancer to receive their first treatment after diagnosis were 74 days, 65 days and 56 days respectively. The waiting time at 90th percentile of patients receiving radical radiotherapy³ was 28 days in 2017-18, which was stable in the past two years.
- 17. HA has gradually increased the service capacity along cancer patient journey. For pathology, the capacity of molecular diagnostic services was gradually expanded to improve the access to these tests, for example, by blood, lung, breast, colorectal and gastric cancer patients, in the past few years. In view of the increasing demand on staging imaging for confirmed cancer cases, HA has implemented the "Project on Enhancing Radiological Investigation Services through Collaboration with the Private Sector" (Radi Collaboration) since May 2012 to provide computed tomography ("CT") and

5

The six oncology centres are located in Pamela Youde Nethersole Eastern Hospital, Queen Mary Hospital, Queen Elizabeth Hospital, Princess Margaret Hospital, Prince of Wales Hospital and Tuen Mun Hospital.

The 90th percentile waiting time refers to the number of days between the date when a case is diagnosed with cancer after pathological examination and the date when the patient receives the first treatment. The waiting time of 90 per cent of such cases is shorter than the value indicated.

The 90th percentile waiting time for cancer patients wait for the first attendance of RT treatment from booking or when patient is ready to treat.

magnetic resonance imaging ("MRI") examinations for selected cancer patients fulfilling pre-defined clinical criteria. The target patient groups of the project have been expanded over the years to benefit patients of more cancer types. HA has also improved its service capacity through installing additional CT and MRI machines in the past few years while two positron emission tomorgraphy machines were installed to provide services for patients in need. The overall demand on surgery, chemotherapy and radiotherapy in HA is on the rise and HA has progressively increased the operating theatre sessions, chemotherapy clinic and extended service hours for radiotherapy in various clusters. In recent years, HA has also introduced oncology clinical pharmacy services with a view to enhancing the pharmaceutical care and ensuring the safety of chemotherapy for cancer patients.

- 18. To further enhance the service capacity, HA will -
 - (i) continue to increase the operation theatre sessions to augment the capacity for cancer operations by building up facilities and increase in manpower;
 - (ii) commission the seventh oncology centre in United Christian Hospital upon completion of its redevelopment which is scheduled for 2023 to meet the local needs in Kowloon East; and
 - (iii) augment radiotherapy and chemotherapy service capacity.

Drug Treatment

- 19. Under the HA Drug Formulary, cancer drugs are categorised into General Drugs, Special Drugs and Self-Financed Items ("SFI") with or without safety net coverage by the Samaritan Fund or Community Care Fund ("CCF"). The HA Drug Formulary covers 54 cancer drugs for treatment of 24 types of cancers at present. Currently, the cancer drugs available in the HA Drug Formulary are comparable with those of reference countries, such as England, Scotland and Australia, except the newest drugs which have yet to demonstrate their efficacy and cost-effectiveness.
- 20. Moreover, HA regularly reviews its Drug Formulary to include new cancer drugs or reposition existing drugs into a different category. For

example, self-financed cancer drugs such as Nivolumab for melanoma, Osimertinib for lung cancer, and Palbociclib for breast cancer have been repositioned to SFI with safety net coverage in 2018-19. Furthermore, with the additional recurrent resources from the Government, HA will incorporate specific new drugs / drug classes as special drugs and extend the therapeutic applications of different special drugs / drug classes in the HA Drug Formulary in 2019-20, including drugs for treating cancers.

- 21. For self-financed drugs that are proven to be of significant benefits to patients but very expensive for HA to provide as part of its subsidised services, HA provides financial assistance for needy patients through the safety net of Samaritan Fund. Currently, the Samaritan Fund covers 33 self-financed drugs for treating different types of diseases (including different types of cancer) and the amount of drug subsidies granted under the Samaritan Fund has increased from \$174.9 million in 2011-12 to \$331.7 million in 2017-18.
- 22. In addition to the Samaritan Fund safety net, HA launched the First Phase of the CCF Medical Assistance Programme (First Phase Programme) on 1 August 2011 to provide financial assistance to HA patients to purchase specified self-financed cancer drugs which have been rapidly accumulating medical scientific evidence and with relatively higher efficacy but have not yet fulfilled the criteria for inclusion into the safety net of Samaritan Fund. Currently, the First Phase Programme covers 21 self-financed drugs for treating 14 types of cancer. The amount of subsidies granted under the First Phase Programme has increased from \$10.3 million in 2011-12 to \$168.8 million in 2017-18.
- 23. With a view to alleviating the financial burden of patients' families, the Government and HA have introduced measures in early 2019 to enhance the means test mechanism for SF and CCF Medical Assistance Programmes upon the completion of the review on the mechanism. The enhancement measures, which would lower patient contribution to drug expenses and provide financial protection for patients and their families, include modifying the calculation of annual disposable financial resources for drug subsidy application by counting only 50% of the patients' household net assets; and refining the definition of "household" adopted in financial assessment. Furthermore, to shorten the lead time for introducing suitable new drugs to

the safety net, HA has, since 2018, increased the frequency of the prioritisation exercise for including self-financed drugs in the safety net from once to twice a year.

24. HA welcomes every opportunity to collaborate with drug companies in providing affordable, sustainable and appropriate support for patients and would continue to ensure equitable access to cost-effective drugs of proven efficacy and safety in HA hospitals and clinics.

WAY FORWARD

25. The Government is committed to enhancing the prevention, control and care for cancer. In view of the overall rising cancer burden as well as trends and projections in incidences of different cancers, the Government will implement relevant aspects of cancer work in a more strategic, coordinated and proactive approach in order to cope with the challenges imposed by the cancer burden on population health and society at large. To harness the effectiveness of the various actions on cancer, the Government will shortly promulgate a Cancer Strategy which aims to articulate a holistic plan which will set strategic priorities and direction on actions to prevent and control of cancer as well as to provide more timely and appropriate intervention for cancer patients.

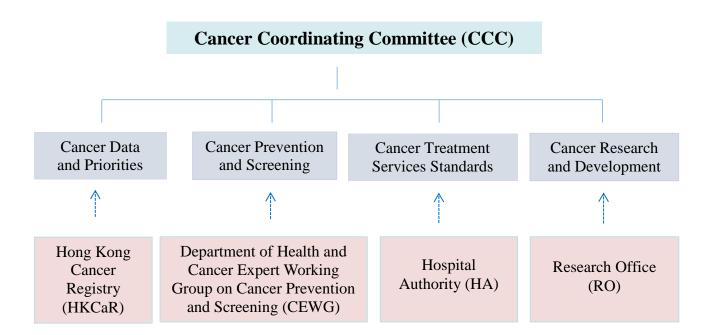
ADVICE SOUGHT

26. Members are invited to note the contents of the paper.

Food and Health Bureau Department of Health Hospital Authority April 2019

Annex A

Organisational Structure of Cancer Coordinating Committee since August 2014



Criteria for Instituting a Population-based Screening Programme⁴

- (i) The condition sought should be an important health problem.
- (ii) There should be an accepted treatment for patients with recognized disease.
- (iii) Facilities for diagnosis and treatment should be available.
- (iv) There should be a recognizable latent or early symptomatic stage.
- (v) There should be a suitable test or examination.
- (vi) The test should be acceptable to the population.
- (vii) The natural history of the condition, including development from latent to declared disease, should be adequately understood.
- (viii) There should be an agreed policy on whom to treat as patients.
- (ix) The cost of case-finding (including diagnosis and treatment of patients diagnosed) should be economically balanced in relation to possible expenditure on medical care as a whole.
- (x) Case-finding should be a continuing process and not a "once and for all" project.

10

Source: Wilson JMG, Jungner G. *Principles and practice of screening for disease*. Geneva: WHO; 1968. Available at: http://www.who.int/bulletin/volumes/86/4/07-050112bp.pdf